

WHAT IS CLAIMED IS

1. An imaging apparatus comprising:

an imaging device for taking an image of an object and for outputting an image data of the object;

a condition judger for judging conditions of the object using the image data outputted from the imaging device;

an image data compensator for compensating the image data corresponding to the result of judgment by the condition judger;

a compensation information selector for selecting the information with respect to the compensation processes by the image data compensator;

a recording data former for forming a recording data by adding the image information to the compensated image data; and

a recorder for recording the recording data into a recording medium.

2. The imaging apparatus in accordance with claim 1, wherein the image information includes at least one information of exposure characteristics, color balancing characteristics, γ - characteristics and edge emphasizing characteristics.

3. An imaging apparatus comprising:

an imaging device for taking an image of an object and for outputting an image data of the object;

a condition judger for judging conditions with respect to the object by using the image data outputted from the imaging

device;

an image data compensator for compensating the image data corresponding to the result of judgment by the condition judger;

an image judgment information selector for selecting the result of judgment of conditions with respect to the object by the condition judger;

a recording data former for forming a recording data by adding the information with respect to the result of judgment to the compensated image data; and

a recorder for recording the recording data into a recording medium.

4. The imaging apparatus in accordance with claim 3, wherein the information with respect to the result of judgment includes at least one of scene information and person information.

5. An image outputting apparatus comprising:

a data input device for taking a recording data including an image data of an image and an information with respect to the image from an external equipment;

an image data compensator for compensating the image data with using the information with respect to the image included in the recording data;

an image outputting mechanism for outputting an image; and

an image output controller for controlling the image

outputting mechanism so as to output an image by using the compensated image data; wherein

the image compensator executes the compensation processes to the image data corresponding to output characteristics of the image outputting mechanism.

6. The image outputting apparatus in accordance with claim 5, wherein the recording data is taken from a recording media which is recorded by a recorder of an imaging apparatus,

the imaging apparatus comprises:

an imaging device for taking an image of an object and for outputting an image data of the object;

a condition judger for judging conditions of the object using the image data outputted from the imaging device;

an image data compensator for compensating the image data corresponding to the result of judgment by the condition judger;

a compensation information selector for selecting the information with respect to the compensation processes by the image data compensator;

a recording data former for forming a recording data by adding the image information to the compensated image data; and

the recorder for recording the recording data into the recording medium.

7. The image outputting apparatus in accordance with claim 6, wherein the image information includes at east one

information of exposure characteristics, color balancing characteristics, γ -characteristics and edge emphasizing characteristics.

8. The image outputting apparatus in accordance with claim 5, wherein the recording data is taken from a recording media which is recorded by a recorder of an imaging apparatus, the imaging apparatus comprises:

an imaging device for taking an image of an object and for outputting an image data of the object;

a condition judger for judging conditions with respect to the object by using the image data outputted from the imaging device;

an image data compensator for compensating the image data corresponding to the result of judgment by the condition judger;

an image judgment information selector for selecting the result of judgment of conditions with respect to the object by the condition judger;

a recording data former for forming a recording data by adding the information with respect to the result of judgment to the compensated image data; and

the recorder for recording the recording data into the recording medium.

9. The image outputting apparatus in accordance with claim 8, wherein the information with respect to the result of

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judgment includes at least one of scene information and person information.

10. An image processing system configured by an imaging apparatus and an image outputting apparatus, wherein the imaging apparatus comprising:

an imaging device for taking an image of an object and for outputting an image data of the object;

a condition judger for judging conditions of the object using the image data outputted from the imaging device;

an image data compensator for compensating the image data corresponding to the result of judgment by the condition judger;

a compensation information selector for selecting the information with respect to the compensation processes by the image data compensator;

a recording data former for forming a recording data by adding the image information to the compensated image data; and

a recorder for recording the recording data into a recording medium; and

the image outputting apparatus comprising:

a data input device for taking the recording data from the recording medium;

an image data compensator for compensating the image data with using the information with respect to the image included in the recording data;

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an image outputting mechanism for outputting an image;
and

an image output controller for controlling the image outputting mechanism so as to output an image by using the compensated image data; wherein

the image compensator executes the compensation processes to the image data corresponding to output characteristics of the image outputting mechanism.

11. The image processing system in accordance with claim 10, wherein the image information includes at least one information of exposure characteristics, color balancing characteristics, γ -characteristics and edge emphasizing characteristics.

12. An image processing system configured by an imaging apparatus and an image outputting apparatus, wherein the imaging apparatus comprising:

an imaging device for taking an image of an object and for outputting an image data of the object;

a condition judger for judging conditions with respect to the object by using the image data outputted from the imaging device;

an image data compensator for compensating the image data corresponding to the result of judgment by the condition judger;

an image judgment information selector for selecting the

result of judgment of conditions with respect to the object by the condition judger;

a recording data former for forming a recording data by adding the information with respect to the result of judgment to the compensated image data; and

a recorder for recording the recording data into a recording medium; and

the image outputting apparatus comprising:

a data input device for taking the recording data from the recording medium;

an image data compensator for compensating the image data with using the information with respect to the image included in the recording data;

an image outputting mechanism for outputting an image; and

an image output controller for controlling the image outputting mechanism so as to output an image by using the compensated image data; wherein

the image compensator executes the compensation processes to the image data corresponding to output characteristics of the image outputting mechanism.

13. The image processing system in accordance with claim 12, wherein the information with respect to the result of judgment includes at least one of scene information and person information.

14. An imaging apparatus comprising:

an imaging device including a plurality of photo-electro transfer elements which are two-dimensionally arranged and outputting an image data of an object by taking an image of the object;

an operation member which can be operated from outside of the imaging apparatus;

a display device for displaying an image;

an operation controller selecting preparation state which is a prior stage of image taking operation corresponding to a first operation of the operation member, and executing the image taking operation for recording an image data of an object corresponding to a second operation of the operation member in the preparation state;

a first judger for judging a condition with respect to the object with using a first data obtained by executing a first process to a first image data outputted from the imaging device in the preparation state;

a second judger for judging a condition with respect to the object with using a second data obtained by executing a second process to a second image data outputted from the imaging device when the second operation is acted on the operation member;

an image data compensator for executing a first compensation process to the first image data corresponding to

result of judgment by the first judger in the preparation state, and for executing a second compensation process to the second image data corresponding to result of judgment by the second judger when the second operation is acted on the operation member;

a display controller for displaying the image of the object with using the first image data to which the first compensation process is executed in the preparation state; and

a recording controller for recording the second image data to which the second compensation process is executed when the image taking operation is executed.

15. The imaging apparatus in accordance with claim 14, wherein

the first judger executes a first data retrieving process for retrieving data from pixel data outputted from the photo-electro transfer elements of the imaging device by thinning at a first pitch as the first process, and judges the condition with respect to the object with using the retrieved data; and

the second judger executes a second data retrieving process for retrieving data from pixel data outputted from the photo-electro transfer elements of the imaging device by thinning at a second pitch smaller than the first pitch as the second process, and judges the condition with respect to the object with using the retrieved data.

16. The imaging apparatus in accordance with claim 14,

wherein

the first judger executes a first data dividing process for dividing pixel data outputted from the photo-electro transfer elements of the imaging device into m-number of areas ("m" is an integer equal to or larger than two) as the first process, and judges the condition with respect to the object with using the data included in each area; and

the second judger executes a second data dividing process for dividing pixel data outputted from the photo-electro transfer elements of the imaging device into n-number of areas ("n" is an integer larger than "m") as the second process, and judges the condition with respect to the object with using the data included in each area.

17. The imaging apparatus in accordance with claim 14, wherein the first judger and the second judger respectively judges at least one of scene, position of a main object and a position of a person as the condition with respect to the object.

18. An imaging apparatus comprising:

an imaging device including a plurality of photo-electro transfer elements which are two-dimensionally arranged and outputting an image data of an object by taking an image of the object;

an operation member which can be operated from outside of the imaging apparatus;

a display device for displaying an image;

an operation controller selecting preparation state which is a prior stage of image taking operation corresponding to a first operation of the operation member, and executing the image taking operation for recording an image data of an object corresponding to a second operation of the operation member in the preparation state;

a first judge for judging a condition with respect to the object with using a first image outputted from the imaging device in the preparation state;

a second judge for judging a condition with respect to the object with using a second image data outputted from the imaging device when the second operation is acted on the operation member;

a first image data compensator for executing a first compensation process to the first image data corresponding to result of judgment by the first judge;

a second image data compensator for executing a second compensation process to the second image data corresponding to result of judgment by the second judge;

a display controller for displaying the image of the object with using the first image data to which the first compensation process is executed in the preparation state; and

a recording controller for recording the second image data to which the second compensation process is executed when the image taking operation is executed.

19. The imaging apparatus in accordance with claim 18, wherein

the second image data compensator executes compensation processes to the second image data with respect to a plurality of characteristics; and

the first image data compensator executes compensation processes to the first image data with respect to a part of the characteristics.

20. The imaging apparatus in accordance with claim 19, wherein the characteristics includes at least an exposure value, color balancing characteristics and γ -characteristics, and the first image data compensator executes the compensation processes with respect to the exposure value and the color balancing characteristics.

21. The imaging apparatus in accordance with claim 18, wherein the first image data compensator calculates a compensation quantity of the first image data corresponding to the result of the judgment by the first judge, and executes the first compensation process with using a predetermined level as the compensation quantity when the calculated compensation quantity is equal to or larger than the predetermined level.